## PCT

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|  | International Application No.   |  |  |  |
|--|---|--|--|--|
| REQUEST  | International Filing Date   |  |  |  |
| The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.   | Name of receiving Office and "PCT International Application"                                  |  |  |  |
|  | Applicant's or agent's file reference (if destred) (12 characters maximum) P16552PC/AK        |  |  |  |
| BOX NO. I TITLE OF INVENTION<br>A DEVICE FOR INJECTING MEDICAL SUBST   | ANCES.  |  |  |  |
| DOX 1401 11 142 144 144 144 144 144 144 144 144  | n is also inventor  |  |  |  |
| Name and address: (Family name followed by given name; for a legal en<br>The address must include postal code and name of country. The country of<br>Box is the applicant's State (that is, country) of residence If no State of residen |   | Telephone No.  |  |  |
| CARMEL PHARMA AB   |   | Facsimile No.  |  |  |
| BOX 5352<br>SE-402 28 GÖTEBORG   |   | Teleprinter No.  |  |  |
| SWEDEN   |   | Applicant's registration No. with the Office                                   |  |  |
| State (that is, country) of nationality:   | State (that is, country)  |  |  |  |
| for the purposes of.   | ed States except States of America  | the United States of America only the States indicated in the Supplemental Box |  |  |
| BOX NO. III FURTHER APPLICANT(S) AND/OR (FURT  |   |  |  |  |
| Name and address: (Family name followed by given name; for a legal en<br>The address must include postal code and name of country. The country of<br>Box is the applicant's State (that is, country) of residence if no State of reside  | ntiv, full official designation.<br>The address indicated in this<br>noe is indicated below.) | This person is:  applicant only  |  |  |
| WALLÉN, Claes<br>HÄSTHOVSGATAN 4   | applicant and inventor inventor only (If this check-box                                       |  |  |  |
| SE-518 40 SJÖMARKEN  |   | is marked, do not fill in below.)  |  |  |
| SWEDEN   |   | Applicant's registration No. with the Office                                   |  |  |
| State (that is, country) of nationality:   | State (that is, country, SE   | ) of residence:  |  |  |
| This man is applicant   all designated   all designa   | ted States except States of America   | the United States of America only the States indicated in the Supplemental Box |  |  |
| Further applicants and/or (further) inventors are indicated  |   |  |  |  |
| Box No. IV AGENT OR COMMON REPRESENTATIV   | E; OR ADDRESS FOI   | R CORRESPONDENCE   |  |  |
| The person identified below is hereby/has been appointed to ac<br>of the applicant(s) before the competent International Authoriti   | Ca Lis.   | agent common representative  |  |  |
| Name and address: (Fumily name followed by given name; for a legal with the address must include postal code and name of   | nttry, full official designation<br>(country.)  | T4031307700  |  |  |
| STRÖM & GULLIKSSON IP AB<br>SJÖPORTEN 4  |   | Facsimile No.<br>+46317790640  |  |  |
| SE-417 64 GÖTEBORG<br>SWEDEN   |   | Teleprinter No.  |  |  |
| SAAFDEIA   | Agent's registration No. with the Office  |  |  |  |
| Address for correspondence: Mark this check-box whe  | re no agent or common r   | epresentative is/has been appointed and the should be sent.                    |  |  |

Form PCT/RO/101 (first sheet) (March 2001; reprint July 2003)

See Notes to the request form



be marked Mark the applicable check-boxes below; at least one Box No. V DESIGNATION OF STATES The following designations are hereby made under Rule 4.9(a):

- Regional Patent AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (If other kind of protection or treatment desired,
- 🖪 EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, MU Hungary, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, RO Romania, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- 🛮 OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Carneroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind

National Patent (if other kind of protection or treatment desired, specify on dotted line): AG Antigua and Barbuda

IN AL Albania ... In Indonesia

PG Papua New Guinea

IN PH Philippines ..... PH Philippines .... RO Romania BA Bosnia and Herzegovina..... KE Kenya.... SC Sevenelles KG Kyrgyzstan BB Barbados BR Brazil..... BY Belarus ...... X KR Republic of Korea ..... SG Singapore BZ Belize..... KZ Kazakhstan.... SK Slovakia.... SL Sierra Leone..... LC Saint Lucia CA Canada SY Syrian Arah Republic M CH & LI Switzerland and Liechtenstein 🔀 LK Sri Lanka X TJ Tajikistan..... TN Tunisia TR Turkey.... CU Cuba...... LU Luxembourg . TT Tripidad and Tobago ..... DE Germany ..... MA Morocco ..... ₩ UA Ukraine M DM Dominica EC Ecuador ...... MKThe former Yugoslav Republic of US United States of America ..... Macedonia ..... FI Finland ...... MWMalawi ..... X VC Saint Vincent and the Grenadines GB United Kingdom GD Grenada ZA South Africa ...... ZM Zambia M Gambia Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet: 

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

| *   |  | Sheet No3   |  |  |  |  |  |
|---|--|---|--|--|--|--|--|
| Box No. VI PRIORITY   | CLAIM  |   |  |  |  |  |  |
| The priority of the following   | earlier application(s) is here                               | eby claimed:  | ·                                      |  |  |  |  |
| Filing date   | Number<br>of earlier application                             | Where earlier application is:   |  |  |  |  |  |
| of earlier application<br>(day/month/year)  |  | national application:<br>country of Member<br>of WTO  | regional application:* regional Office | international application:<br>receiving Office |  |  |  |
| item (1)<br>09-07-2002<br>(9 JULY 2002)   | 60/394,289   | USA   |  |  |  |  |  |
| item (2)<br>09-07-2002<br>(9 JULY 2002)   | 0202175-6  | SE  |  |  |  |  |  |
| item (3)  |  |   |  |  |  |  |  |
| item (4)  |  |   |  |  |  |  |  |
| item (5)  |  |   |  |  |  |  |  |
|   | are indicated in the Supplem                                 |   |  |  |  |  |  |
| The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the proposes of this international application is the receiving Office) identified above as:  All items item (1) item (2) item (3) item (4) item (5) Supplemental Box |  |   |  |  |  |  |  |
| * Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(il)):   |  |   |  |  |  |  |  |
| Box No. VII INTERNAT  | TONAL SEARCHING AU   | THORITY   |  |  |  |  |  |
| Choice of International Ses   | arching Authority (ISA) (if<br>the Authority chosen; the two | two or more International S<br>o-letter code may be used):  | Searching Authorities are              | competent to carry out the                     |  |  |  |
| ISA / SE  |  |   |  |  |  |  |  |
| Request to use results of ea  | arlier search; reference to                                  | that search (if an earlier s  | earch has been carried o               | ut by or requested from the                    |  |  |  |
| International Searching Auth Date (day/monthlyear)  | Num  | ber Cour  | atry (or regional Office)              |  |  |  |  |
| 9 JULY 2002   | \$E 0  | 2/00697   | SE                                     |  |  |  |  |
| Box No. VIII DECLARA  | ΠONS   |   |  |  |  |  |  |
| The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable  Number of check-boxes below and indicate in the right column the number of each type of declaration):  Number of declarations  |  |   |  |  |  |  |  |
| Box No. VIII (i)  | Declaration as to the identi                                 | ity of the inventor   |  | ;  |  |  |  |
| Box No. VIII (ii)   |  | as to the applicant's entitlement, as at the international filing y for and be granted a patent : |  |  |  |  |  |
| Box No. VIII (iii)  | Declaration as to the app<br>date, to claim the priority     | plicant's entitlement, as at the international filing  y of the earlier application :             |  |  |  |  |  |
| Box No. VIII (iv)   | Declaration of inventorsh<br>United States of America        | ip (only for the purposes o   | of the designation of the              | <b>:</b>                                       |  |  |  |

Declaration as to non-prejudicial disclosures or exceptions to lack of novelty

Form PCT/RO/101 (third sheet) (July 2002; reprint July 2003)

Box No. VIII (v)

See Notes to the request form

| <u>.</u>   | Sheet No4  |                  |  |  |  |  |  |  |
|--|--|------------------|--|--|--|--|--|--|
| BOX NO. IX CHECK LIST; LANGUAGE OF FILING  |  |                  |  |  |  |  |  |  |
| This international application contains:  (a) in paper form, the following number of sheets:   | This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):                                 | Number of items  |  |  |  |  |  |  |
| request (including   | 1. X fee calculation sheet   | : 1              |  |  |  |  |  |  |
| declaration sheets) 4  | 2.  original separate power of anomey  | .                |  |  |  |  |  |  |
| description (excluding sequence listings and/or  | <ul> <li>3.  original general power of attorney</li> <li>4.  copy of general power of attorney; reference number,</li> </ul>   | •                |  |  |  |  |  |  |
| tables related thereto)  | if any:  | :                |  |  |  |  |  |  |
| abstract : 1   | 5: Statement explaining lack of signature  | ا ا              |  |  |  |  |  |  |
| drawings : 4.  | 6. priority document(s) identified in Box No. VI as item(s):   | :                |  |  |  |  |  |  |
| Sub-total number of sheets: 17 sequence listings:  | 7. Translation of international application into (language):   | :                |  |  |  |  |  |  |
| tables related thereto :  (for both, actual number of  | 8.  separate indications concerning deposited microorganism or other biological material   | :                |  |  |  |  |  |  |
| sheets if filed in paper form,<br>whether or not also filed in   | 9.  sequence listings in computer readable form (indicate type and number of carriers)   |                  |  |  |  |  |  |  |
| computer readable form; see (c) below)   | (i) copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application  | ):               |  |  |  |  |  |  |
| Total number of sheets : 17  (b) only in computer readable form  | (ii) (iii) (iii) where check-box (b)(i) or (c)(i) is marked in left column)<br>additional copies including, where applicable, the copy for the<br>purposes of international search under Rule 13 ter | :                |  |  |  |  |  |  |
| (Section 801(a)(i)) (i) sequence listings  | (iii) together with relevant statement as to the identity of the copy of copies with the sequence listings mentioned in left column  | :                |  |  |  |  |  |  |
| (ii) I tables related thereto (c) I also in computer readable form   | 10. In tables in computer readable form related to sequence listings (indicate type and number of carriers)  |                  |  |  |  |  |  |  |
| (Section 801(a)(ii))  (i)  sequence listings  (ii)  tables related thereto   | <ul> <li>(i) copy submitted for the purposes of international search under<br/>Section 802(b-quater) only (and not as part of the international<br/>application)</li> </ul>                          |                  |  |  |  |  |  |  |
| Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are   | (ii) (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) | :                |  |  |  |  |  |  |
| contained the sequence listings:   | (iii) together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column:  |                  |  |  |  |  |  |  |
| tables related thereto:  | 11. So other (specify): COPY OF ITS-REPORT SE 02/00697   | :                |  |  |  |  |  |  |
| (additional coples to be indicated under<br>items 9(il) and/or 10(ii), in right column)  | 11. EST ORDER (Opensyly)   | ·                |  |  |  |  |  |  |
| Figure of the drawings which   | Language of filing of the SWEDISH international application:   |                  |  |  |  |  |  |  |
| should accompany the abstract:  Box No. X SIGNATURE OF APPLICAN  | T A CENT OF COMMON PEPPESENTATIVE  | ·                |  |  |  |  |  |  |
| Nea to each signature, indicate the name of the person sign  | ning and the capacity in which the person signs (if such capacity is not obvious from reading  | the requesty.    |  |  |  |  |  |  |
| GOTHENBURG, 8 JULY 2003  |  |                  |  |  |  |  |  |  |
| Acho   |  |                  |  |  |  |  |  |  |
| ANDREW HAMMOND<br>STRÖM & GULLIKSSON IP AB   |  |                  |  |  |  |  |  |  |
|  | For receiving Office use only  |                  |  |  |  |  |  |  |
| Date of actual receipt of the purported international application:   | 2. Draw  | rings:<br>eived: |  |  |  |  |  |  |
| <ol> <li>Corrected date of actual receipt due to later the timely received papers or drawings complete the purported international application:</li> </ol> | ing  |                  |  |  |  |  |  |  |
| 4. Date of timely receipt of the required corrections under PCT Article 11(2):   | not  | received:        |  |  |  |  |  |  |

Date of receipt of the record copy by the International Bureau:

For International Bureau use only

Transmittal of search copy delayed until search fee is paid

5. International Scarching Authority (if two or more are competent): ISA /